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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,145	11/15/2000	Jong Heon Kim	K-234	8568

7590 02/20/2004

Fleshner & Kim, LLP  
14500 Avion Parkway  
Suite 125  
Chantilly, VA 20151

EXAMINER
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LUGO, DAVID B

ART UNIT	PAPER NUMBER
2634	

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/712,145

Applicant(s)

KIM, JONG HEON

Examiner

David B. Lugo

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2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10, drawn to a PN code generator having shift registers, a control unit that provides a control signal for a normal state or a PN chip advance, and MUXs for outputting an output value for a next normal state or a PN chip advance to the shift registers, classified in class 375, subclass 130.
  - II. Claims 11-15, drawn to an apparatus for generating PN codes comprising a first circuit for obtaining a normal state of n bit length shift registers, a second circuit for obtaining the next state of the shift registers for a one PN chip advance, and a third circuit for obtaining the next state for a chip retard, classified in class 708, subclass 250.
  - III. Claim 16, drawn to an apparatus for generating PN codes having a first MUXs group, first and second comparators for comparing the present load state and the next load state of n shift registers, and a decoder for outputting values into the first MUXs group, classified in class 708, subclass 252.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II, I and III, and II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)).

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3. In the case of inventions I and II, the combination as claimed does not require the particulars of the subcombination as claimed as shown by the lack of details in claim 11 of a control unit for outputting a control signal and MUXs for outputting an output value of the next state for either normal operation or a PN chip advance. The subcombination has separate utility such as generating PN values in a system where a control signal allows for a PN chip retard without a separate third circuit. In the case of inventions I and III, the combination as claimed does not require the particulars of the subcombination as claimed as shown by the lack of details in claim 16 of the MUXs outputting an output value of the next state for either normal operation or a PN chip advance to the shift registers. The subcombination has separate utility such as generating PN values in a system where a control signal is generated directly as a result of an advance command without a combinational circuit for receiving and processing the advance command in conjunction with a comparator output. In the case of inventions II and III, the combination as claimed does not require the particulars of the subcombination as claimed as shown by the lack of details in claim 16 of a first circuit, a second circuit, and a third circuit to generate a next normal state, a next state for a PN chip advance, and a next state for a PN chip retard, respectively. . The subcombination has separate utility such as generating PN values in a system where a control signal is generated directly as a result of an advance command without a combinational circuit for receiving and processing the advance command in conjunction with a comparator output.

4. Because these inventions are distinct for the reasons given above, the search required for Group III is not required for Groups I or II, and the search required for Group II is not required for Group II, restriction for examination purposes as indicated is proper.

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5. A telephone call was made to Daniel Kim on February 12, 2004 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David B. Lugo** whose telephone number is **(703) 305-0954**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

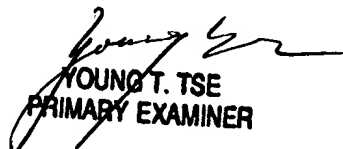
**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

dl  
2/13/04

  
**YOUNG T. TSE**  
**PRIMARY EXAMINER**